Office of Substance Abuse Services

Substance Use and Personality Disorders

Prevalence

Personality disorders (PDs) are "rigid, inflexible, and maladaptive behavior patterns of sufficient severity to cause significant impairment in functioning or internal distress. They are enduring and persistent styles of behavior and thought, not atypical episodes (CSAT, 1994). The high prevalence of DSM – IV personality disorders (PDs) among those with substance use disorders is evident in the research literature. A recent literature review summarizing prevalence rates (Verheul, 2001) concludes that estimates of the overall Axis II prevalence range from 10.0 to 14.8% in normal subjects, from 45.2 to 80.0% in psychiatric patients, and from 34.8 to 73.0% in treated addicts, with the most popular PDs being antisocial (APD) and borderline (BPD) personality disorders. Skinstad and Swain (2001) found that 56% of a sample of inpatient men who were polysubstance dependent met the criteria for a cluster BPD, with BPD and histrionic PD most frequent. Ross et al. (2003) reported that 53% of a sample of dual-diagnosed patients met the criteria for PD – 74% for BPD and 66% for APD. APD has also been found to have a strong association with cannabis (the most widely used illegal drug in the U.S. population) dependence (Agosti, Nunes and Levin, 2002). Routine assessment for PDs could 1) add to a proper understanding of the etiology of the addictive behavior in the individual patient, 2) have patient –treatment matching implications; and 3) facilitate the best strategy of tailoring standard and protocol interventions to the individual's needs and oddities (Verheul, 2001).

Relationship

Verheul (2001) proposes that the onset and course of the addiction is considered to result from a continuous reciprocal interaction between the individual's (inherited) biological and psychological vulnerabilities and resources on the one hand, and psychosocial circumstances on the other hand. The relationship between co-morbid PDs and substance use disorders is indicated using the following table.

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Reviews to Use

Current Literature Reviews for the Substance Abuse Professional

Table 1: Co-morbidity of personality disorders and substance use disorders accounted for by distinct causal or developmental pathways to addiction

Pathway	Axis II Disorders	Substances
Behavioral disinhibition pathway	Antisocial, borderline	Cocaine, amphetamines
Stress reduction pathway	Avoidant, dependent, schizotypal, borderline	Alcohol, heroin, benzodiazepines
Reward sensitivity pathway	Histrionic, narcissistic	Most substances

From: Co-morbidity of personality disorder in individuals with substance use disorders, in European Psychiatry 2001; 16: 274-82.

Other research is also beginning to define the relationships between personality traits, substance of choice, and polysubstance involvement. Bernstein, Stein and Handelsman (1998) found that child maltreatment, more specifically physical and emotional abuse and or neglect, were risk factors for PD clusters and contributed to the high prevalence of co-morbid PDs in an addicted adult population. Mueser et al., (1999) found that childhood conduct disorder (CD) and adult APD represent significant risk factors for substance use disorders in patients with schizophrenia-spectrum and major affective disorders. Franken and Hendricks (2000) reported that early onset (prior to age 18) of substance use disorder had significantly higher antisocial, borderline and passive-aggressive personality symptomatology than in patients with a late onset. Conway et al. (2003) found a small relationship between personality traits and substance of choice but concluded that there was an association between behavioral disinhibition and a continuum of addiction defined primarily in terms of the extent of polysubstance involvement. They reported that among polysubstance abusers, there was a significantly higher prevalence of antisocial, passive aggressive, and borderline PDs, whereas among pure alcoholics there were more dependent PDs. Female polysubstance abusers were more likely to have BPD and male polysubstance abusers were more likely to have APD. Female alcoholics were more likely to have Cluster C PDs, and male alcoholics were more likely to have Cluster A disorders, particularly schizoid PD. They conclude that the subtypes are distinct enough to warrant difference in treatment needs.

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Adolescents

Recent research has begun to examine the role of PD in the adolescent population with substance use disorders as well. A study tracking the progression from conduct disorder in an adolescent substance abusing population found a high rate of progression to APD predicted by the onset of deviant behavior at or before age 10, a greater diversity of deviant behavior, and more extensive pretreatment drug use (Myers, Stewart and Brown, 1998). Armstrong and Costello (2002) conducted a literature review and found that 60% of youths with substance use, abuse, or dependence had a comorbid diagnosis, most commonly conduct disorder and oppositional defiant disorder. Serman et al. (2002) reported that adolescents with PDs reported more frequent alcohol consumption than

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those without PDs. Adolescents with BPD reported more cigarette smoking and heavy alcohol consumption and those with APD reported greater alcohol, cigarette and illicit drug use. Sussman, McCuller, and Dent (2003) sampled 1,050 high-risk youth and reported that the most concurrent consistent predictors of substance use were male gender, APD, and social self-control and concluded that social self-control skill training is relevant in SA prevention programming.

Treatment Outcomes

A recent literature review (Verheul, 2001) summarized eight studies and concluded that substance abusers with co-morbid personality disorders benefit from treatment at least as much as those without, contrary to studies conducted in the 80's which concluded that co-morbid PDs predicted poor treatment response or outcomes, including problems in the therapeutic relationship or working alliance, resistance to change, noncompliance and premature treatment dropout. Other studies did predict that the PD might have a strong impact on the course of addictive problems after discharge, including shorter time to relapse. The author also concludes that the impact of the patient's personality on outcome might be partly mediated by its influence on certain aspects of the treatment process and that personality traits interact with one another as well as with other important patient characteristics such as motivation for change in their impact on treatment process and outcomes. Current research continues to document this trend. Recent evidence found that Dialectical Behavior Therapy can be effectively applied with patients have BPD and co-morbid substance use disorder, as DBT reduced BPD symptoms, however had no effect on the substance use problems (van den Bosche et al., 2002). Messina et al. (2002) examined the relationship of APD to therapeutic community (TC) treatment outcomes and determined that persons diagnosed with APD can benefit from TC treatment as well as those with no APD. Ross et al. (2003) also found no difference in global improvement in a dual diagnosis treatment program for patients with and without Axis II diagnoses; however, those with PDs appeared to be less likely to be compliant with attending their initial follow-up appointment.

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Conclusion

Personality disorders and substance use disorders are commonly found together. Although the high prevalence rates of comorbid Axis II disorders and substance use disorders is documented in research literature, little is known about the exact nature of their relationship either in terms of etiology or outcomes. The limited research on treatment for clients with comorbid personality disorders indicates that some current treatment modalities are as effective for these consumers as for those with sole substance use disorders.

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